

Meeting of the Federal Open Market Committee

March 28, 1989

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D. C., on Tuesday, March 28, 1989 at 9:00 a.m.

PRESENT: Mr. Greenspan, Chairman
Mr. Corrigan, Vice Chairman
Mr. Angell
Mr. Guffey
Mr. Heller
Mr. Johnson
Mr. Keehn
Mr. Kelley
Mr. LaWare
Mr. Melzer
Ms. Seger
Mr. Syron

Messrs. Boykin, Hoskins, and Stern, Alternate Members
of the Federal Open Market Committee

Messrs. Black, Forrestal, and Parry, Presidents of the Federal Reserve Banks of Richmond, Atlanta, and San Francisco, respectively

Mr. Kohn, Secretary and Economist
Mr. Bernard, Assistant Secretary
Mr. Gillum, Deputy Assistant Secretary
Mr. Mattingly, General Counsel
Mr. Patrikis, Deputy General Counsel
Mr. Prell, Economist
Mr. Truman, Economist

Messrs. Balbach, R. Davis, T. Davis, Lindsey,
Ms. Munnell, Messrs. Promisel, Scheld,
Siegman, and Simpson, Associate Economists

Mr. Sternlight, Manager for Domestic Operations, System
Open Market Account

Mr. Cross, Manager for Foreign Operations, System
Open Market Account

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Mr. Coyne, Assistant to the Board of Governors
Mr. Ettin, Deputy Director, Division of Research and
Statistics, Board of Governors
Mr. Stockton, Assistant Director, Division of Research
and Statistics, Board of Governors
Mr. Keleher, Assistant to Governor Johnson, Office of
Board Members, Board of Governors
Mr. Wajid, Assistant to Governor Heller, Office of
Board Members, Board of Governors
Ms. Low, Open Market Secretariat Assistant, Division of
Monetary Affairs, Board of Governors

Mr. Stone, First Vice President, Federal Reserve
Bank of Philadelphia

Messrs. Beebe, J. Davis, Lang, Rolnick, Rosenblum, and
Ms. Tschinkel, Senior Vice Presidents, Federal Reserve
Banks of San Francisco, Cleveland, Philadelphia,
Minneapolis, Dallas, and Atlanta, respectively

Mr. Cook, Vice President, Federal Reserve Bank of
Richmond

Mr. Guentner, Assistant Vice President, Federal Reserve
Bank of New York

Transcript of Federal Open Market Committee Meeting of
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MR. JOHNSON. This is the meeting when officer nominations are usually made. So, I'd like to open the meeting by asking for nominations for the Chairman of the FOMC and then the Vice Chairman. We're open for nominations.

MR. ANGELL. I nominate Alan Greenspan--unless it is already set. Do you have someone set to make the motion?

MR. JOHNSON. Let's get on with this.

MR. ANGELL. Okay. Alan Greenspan and Gerald Corrigan.

MR. JOHNSON. All right. We have nominations for Chairman Alan Greenspan and Vice Chairman Gerald Corrigan. All those in favor?

SPEAKER(?). Enthusiastically.

CHAIRMAN GREENSPAN. [Unintelligible.]

MR. JOHNSON. I think it goes without saying that we have some outstanding nominations. We're ready to proceed, Mr. Chairman.

CHAIRMAN GREENSPAN. I thank you. I think what we need next is the election of staff officers. Norm, would you read the list?

MR. BERNARD.

Secretary and Economist, Donald Kohn
Assistant Secretary, Normand Bernard
Deputy Assistant Secretary, Gary Gillum
General Counsel, Virgil Mattingly
Deputy General Counsel, Ernest Patrikis
Economist, Michael Prell
Economist, Edwin Truman

Associate Economists from the Board:

David Lindsey;
Larry Promisel;
Charles Siegman;
Thomas Simpson; and
Lawrence Slifman.

Associate Economists from the Federal Reserve Banks:

Anatol Balbach, proposed by President Melzer;
Richard Davis, proposed by President Corrigan;
Thomas Davis, proposed by President Guffey;
Alicia Munnell, proposed by President Syron; and
Karl Scheld, proposed by President Keehn.

CHAIRMAN GREENSPAN. Would somebody like to move that?

VICE CHAIRMAN CORRIGAN. I will.

CHAIRMAN GREENSPAN. Is there a second?

MR. JOHNSON. Second.

CHAIRMAN GREENSPAN. Without objection, it's so ordered. The next item on the agenda is the selection of a Federal Reserve Bank to execute transactions for the System Open Market Account. Is there a nomination?

MS. SEGER. How about Cleveland?

CHAIRMAN GREENSPAN. Call again.

MS. SEGER. Is New York okay for a second choice?

MR. JOHNSON. I'll second that.

CHAIRMAN GREENSPAN. Without objection. I don't like the way this is going!

SPEAKER(?). It sounds all right!

CHAIRMAN GREENSPAN. Our Managers for Domestic Open Market Operations and for Foreign Operations are at the moment, as you know, Peter Sternlight and Sam Cross. Would somebody like to move their reappointments?

MR. JOHNSON. So move.

MR. KELLEY. Second.

CHAIRMAN GREENSPAN. Without objection. We have the review of--and I assume that they have been mailed out to all of you--the Authorization for Domestic Open Market Operations, the Foreign Currency Authorization, the Foreign Currency Directive, and the Procedural Instructions with Respect to Foreign Currency Operations. Would somebody like to move them individually? Let's do them one at a time. Are there any objections to the Authorization for Domestic Open Market Operations? If not, let us assume that it's so ordered. Sam, would you like to discuss the second issue?

MR. CROSS. Yes, Mr. Chairman, I would. I would like to raise one point with respect to the Authorization for Foreign Currency Operations. We are currently authorized to maintain [foreign currency] balances up to a total of \$12 billion equivalent. Our present holdings, at about \$9.4 billion, are well within that limit. But in addition to this formal authorization there are three informal limits which are not contained either in the Authorization, the Directive, or the Procedural Instructions. These [informal understandings] call for us to limit our holdings of German marks to \$8 billion equivalent, Japanese yen to \$3 billion equivalent, and other currencies as a group to \$1 billion equivalent. All of our intervention in recent months has been in marks and we are now about \$150 million or a little more above that informal limit for marks. We notified the Committee of that situation by a telex that was sent out on March 15th. But, Mr. Chairman, I would like to propose that the Committee consider eliminating these informal sublimits for the particular currencies so that the \$12 billion authorization for foreign currency balances could be used more flexibly. I question whether the informal sublimits currently are a very useful management tool. The particular currencies that we operate in are determined, of course, by market conditions and other factors. And in any event, we

would continue to be under a number of limitations--qualitative as well as quantitative limitations--both with the [Foreign Currency] Subcommittee and the Committee. These limits relate to the changes in each currency for a single day and for the intermeeting period as well as changes in the overall balances for a single day in the intermeeting period and so forth. I believe these various limits provide for adequate monitoring and control by the Committee and the Subcommittee without the informal sublimits. Accordingly, I would recommend that the Committee consider eliminating the three informal sublimits. If the Committee did wish to retain those sublimits I would need to request a change in the overall Authorization in order to provide more headroom in the event we need to acquire more marks and yen. So, I recommend the elimination of the three informal sublimits.

CHAIRMAN GREENSPAN. Would somebody like to move that?

VICE CHAIRMAN CORRIGAN. I think I would move it.

CHAIRMAN GREENSPAN. Is there a second?

MR. JOHNSON. Second.

CHAIRMAN GREENSPAN. I've just been informed that we don't want a formal vote on this.

MR. BERNARD. On the informal limits.

CHAIRMAN GREENSPAN. On the informal limits. Let me put it this way: Are there any questions on this issue for Mr. Cross? If not, we'll assume [agreement].

MR. ANGELL. Would there be some notion as to where we might be going in regard to any one currency? That is, would there be any restraint or any notion that there might be some point at which we would acquire more of a particular currency than might be the most advantageous position for our asset holdings?

MR. CROSS. Obviously, we will want over time to acquire various amounts in particular currencies. But I don't think that this particular arrangement is the way in which we are best able to do that. For example, our holdings of yen have been low and we've been undertaking such measures as we could to raise those holdings both for the System and the Treasury. Indeed, we did acquire some yen during this recent period by buying them from a customer. But I don't think that the informal sublimit is a very useful mechanism for doing this. We have to make decisions and acquire those currencies more or less as conditions permit and as our policies aim us to do. I don't think these limits help very much operationally.

MR. ANGELL. So from time to time you would expect to report to the Committee on [individual] currency holdings as compared to what you might think of as some optimum range?

MR. CROSS. Well, if I went too far in saying what was the optimum that might raise a lot of questions. But we certainly report regularly on the amounts of the individual currencies.

MR. ANGELL. Thank you, Mr. Chairman.

MR. LAWARE. I have a question. Sam, is the \$12 billion a big enough kitty for you or do you--?

MR. CROSS. Well, at the present time we have \$9.4 billion and the limit is \$12 billion. Looking ahead, say, for the next year it's certainly conceivable that we would need to go above that. I would assume that the Committee would not find it difficult to change the limit at the time, if the conditions arose. Or, it could be changed right now when we are reviewing this at our annual review.

VICE CHAIRMAN CORRIGAN. But to change the \$12 billion would take specific action of the Committee?

MR. CROSS. [Yes.] That is a formal authorization and that is public. The present authorization is for \$12 billion and has been at that level for a couple of years, I guess.

MR. LAWARE. You don't see any immediate circumstances that would likely put you in a position where you'd have to ask for a special meeting in order to enlarge that limit?

MR. CROSS. Well, we have a \$2-1/2 billion [leeway]. And, of course, when we intervene we have typically done half of it and the Treasury has done half. So that means a potential [increase in U. S. holdings] of \$5 billion worth before we run into a problem. I would assume that if conditions were such that we needed a change in the Authorization, it would not be difficult to propose that and to change it at the time.

MR. LAWARE. Okay. I wasn't trying to sell you anything.

MR. CROSS. No. I'd be happy to have any further headroom the Committee wishes to offer. But I can't really make a strong case that it's likely to happen and would require a meeting.

MR. LAWARE. Thank you, Mr. Chairman.

MR. GUFFEY. Sam, can you remind us: what is the intermeeting limit?

MR. CROSS. Above \$600 million requires the Subcommittee's approval and above \$1-1/2 billion requires the Committee's approval.

MR. GUFFEY. In all currencies?

MR. CROSS. That's in all currencies.

MR. GREENSPAN. Any further discussion on this subject? I will assume a general consensus in favor of Sam's recommendation. However, we do need a vote on the Procedural Instructions with Respect to Foreign Currency Operations. I'll entertain a motion.

VICE CHAIRMAN CORRIGAN. So moved.

MS. SEGER. Second.

CHAIRMAN GREENSPAN. Do all three?

MR. BERNARD. Yes.

CHAIRMAN GREENSPAN. Let's combine all three: the Foreign Currency Authorization and the Foreign Currency Directive as well as the Procedural Instructions.

VICE CHAIRMAN CORRIGAN. So moved.

MR. KELLEY. Second.

CHAIRMAN GREENSPAN. Without objection. Next we have to approve the minutes of the Committee meeting of February 7th and 8th.

VICE CHAIRMAN CORRIGAN. So moved.

MR. KELLEY. Second.

CHAIRMAN GREENSPAN. Without objection. Mr. Cross, would you now report on foreign currency operations for us?

MR. CROSS. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Are there questions for Mr. Cross?

MR. HOSKINS. Sam, I'm just curious as to why we don't buy yen in the open market. I notice a couple of other central banks have done so. Do we have an agreement with them or--?

MR. CROSS. Well, the Ministry of Finance in Japan thus far often has intervened itself to resist the decline in the yen. And the U.S. Treasury has not been prepared up to this point to [intervene unless] we have the agreement of the Japanese before anything is done. And the Japanese have not felt that this situation yet warranted intervention. Now, in the past day or two the pressures on the yen have become more substantial. The Finance Minister did make a statement last night--at which point the yen had weakened to above the 133 level--saying something to the effect that they were watching [developments] very carefully at the 133 level, which was taken by the market as a signal that that might be a key point. The rate then moved down a bit below 133 and that's where it is now. I imagine there will be discussions of this--certainly this weekend when the G-7 gets together. But up to this point the Minister of Finance has not wanted to see intervention or to be involved in intervention to resist the decline.

MR. FORRESTAL. On the general subject of intervention, Sam, do you detect any change in philosophy of the present Administration with respect to intervention? Or are they continuing pretty much in the same vein as the previous Administration?

MR. CROSS. I don't think there has been any very notable change. The G-7, of course, met in February and they are going to meet again. The general premises within which these activities have been taking place remain more or less the same.

CHAIRMAN GREENSPAN. Any further questions for Mr. Cross?

MS. SEGER. I just want to make sure I understood your comment about intervening and the Ministry of Finance. Do we have a deal with the Japanese that we will not intervene unless they [agree]? What if we reached the point that it was in our interest to do so and the Ministry of Finance was still balking?

MR. CROSS. Well, I would hope that it wouldn't come to a point where we were operating at cross purposes with the Japanese. It would be very difficult if we reached the stage where it was as overt as that. These intervention operations obviously work much, much better if all parties are marching together. We have seen many times, both with the Germans and the Japanese, that the market pays a lot more attention when they see that we are uniformly aiming in a certain direction, trying to bring about a certain purpose. It's difficult to be operating in one direction if the central bank or the government on the other side doesn't agree or indeed is opposed to it. So, it's much better to work it out.

MR. TRUMAN. Governor Seger, this is one of the [unintelligible] to President Hoskin's comment. This is one of the asymmetries in the international financial system today. Other countries--

MS. SEGER. It was too subtle for me.

MR. TRUMAN. Small countries can buy yen or sell yen. But for big countries like the United States and Germany and Japan their actions in this area are guided by different understandings, if you want to put it that way, about when one does it for the reasons that Sam mentioned. If Canada buys yen, or even if the UK buys yen, that's not the same thing as our buying yen or the Bank of Japan buying yen. Now, the other point--

MR. CROSS. But even those [transactions] have not been easily arranged.

MR. TRUMAN. That's right.

MR. CROSS. With the Canadians or the others it required working it out with the Japanese. But they are a little more amenable to that than if it's going to impact directly on their exchange rate.

MR. TRUMAN. The other point is that there are certain understandings about the point at which intervention becomes more favorably regarded. But as far as the yen is concerned we're far away from that point.

MS. SEGER. Just looking at their gigantic trade surplus vis-a-vis our own situation, it seems that at some point we'd have to ask ourselves what is in our interest rather than having the Ministry of Finance decide.

MR. CROSS. That's becoming increasingly apparent. It is true that up until recently most of the pressures were not in the yen but were in the European currencies. But it is moving more and more in that direction and it is becoming clear that we are getting to the point where there is a need to do something about the movement in the yen as well. That is part of my own concern. And as I say, the

pressures of the past few days have been led by the movements of the yen. That's the first time during this recent period of activity where that has been the case; but it is now the case. On the other hand, if you look back to the low points--which were at the beginning of last year--the 1988 low point for the mark was 1.56 and we're now at 1.88 and the low point for the yen was just over 120. So, it's getting closer but not quite as much.

CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. I heard what you said, Sam, about Germany but that explanation still doesn't strike me as justifying completely why they have been so reluctant to move. A lot of people seem to be scratching their heads about Germany's behavior relative to inflationary pressures and the fact that they have been sitting back and letting the mark depreciate. I know it has been pretty stable over the intermeeting period in general. But I think the feeling has been: What's going on in Germany compared to their previous behavior?

MR. CROSS. Well, I think there are various factors. They are divided. There are some in Germany who will say that they could be tightening domestically and not necessarily going through the exchange rate. They are divided. The mark has moved up against some currencies as well as having softened against the dollar. If you look at the mark on a trade-weighted basis you don't get the same picture that you do if you look just at the dollar-mark relationship. The Germans, I think, have a genuine problem with respect to the EMS. Their concern at the moment is that the EMS is fully stretched--in other words, they are at the top of the band and, as it turns out, Denmark is now at the bottom of the band. At those levels they have to intervene fully in order to keep the rates from moving beyond that. There were very, very large amounts of intervention in the Danish currency last week, in fact. They did on one day, which is a lot for a small country. And they did almost the next day. The Germans are concerned that--the mark being weak against the dollar and strong against the EMS--if they intervene on the dollar side it's just going to cause a lot more trouble and lead to serious pressures in flows and political problems and all the rest with the EMS.

MR. JOHNSON. But isn't it, though, just the Danish that are down there? The lira--

MR. CROSS. The Danish are down there but the pressures could move to the others, particularly if the question of whether to reform the EMS currency alignments and so forth arose. It could lead to pressures. The French not too long ago had been under some pressure; they are not at the moment. But--

MR. JOHNSON. It just still seems strange, given that nobody paid too much attention when the Italians were way below the band and just hovered there for heaven knows [how long].

MR. TRUMAN. Well, but they weren't down at the 6 percent level. They have a wider band.

MR. JOHNSON. Well, it was a special arrangement.

MR. CROSS. Since Italy is not really in the arrangement, they don't have the same obligation to intervene. So they don't have the same problem on the intervention side.

MR. TRUMAN. Italy has a much broader band.

MR. CROSS. We talk to the Germans and we make these points, too. But I think you do have to recognize that there are pressures from the EMS angle of it.

MR. TRUMAN. One of the problems is that even if they want to move the D-mark [vis-a-vis] the Danish kroner that would raise questions about what else they would do within the EMS. It seems hard to do since there is this strong desire, especially between the Germans and the French, not to do anything for who knows how long. By [their suppressing] all this, it may be like the U.S. attitude toward sterling in the late 1960s.

MR. JOHNSON. Not to prolong this, but what's rotten in Denmark?

MR. CROSS. Well, they have a stagnant economy and they don't want to raise their interest rates. So they are having a lot of capital outflows.

MR. HOSKINS. I'd like just one follow-up. I raised the issue about the Japanese but I haven't heard what their argument is. What did they tell us? Why don't they want us in?

MR. CROSS. They are still concerned or have a fear that the dollar-yen relationship is going to move back in the other direction and that it's going to cause problems there. At least that's what they say. Now, I assume that there is an interest from the point of view of their whole economy and their exports and so forth for them to try not to get back into intervention if they can avoid it. But it gets harder and harder to make that case as the rates move. We are still at 133. And the last time we were intervening I think it was close to 137. So the yen is not within any new ranges in that sense.

CHAIRMAN GREENSPAN. Any further questions for Mr. Cross?

MR. KEEHN. Sam, separate and apart from the central bank attitudes, what's the attitude of the participants in the markets? [Do they see] long-term trends there or is everybody kind of moving day-by-day? What are the basic attitudes?

MR. CROSS. In terms of the dollar outlook? I think they are waiting and I think they are moving--

MR. KEEHN. Day-by-day?

MR. CROSS. --with a short-term focus to see what's going to happen on this. As I said, at the present time these markets are very fickle. They watch one thing for a while and then they watch something else. But right now they are watching very closely the inflation and monetary policy actions in all these countries because there has been so much attention on and concern about whether inflation is growing worldwide. So, that's the main focus of

attention right now: what's going to be done about it and what the various players are going to do.

CHAIRMAN GREENSPAN. Anything else? If not, would somebody like to move to ratify the transactions of Mr. Cross since the February meeting?

VICE CHAIRMAN CORRIGAN. So move.

MR. KELLEY. Second.

CHAIRMAN GREENSPAN. Without objection. Mr. Sternlight.

MR. STERNLIGHT. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Questions for Mr. Sternlight?

MR. HELLER. Peter, I heard you use a term a little earlier that I think I have never heard used before: the indexed level of borrowings.

MR. STERNLIGHT. [That's] borrowing used in the construction of reserve paths, about which we had a good deal of uncertainty. I say uncertainty, but I had a fairly strong suspicion that we were overstating or were using a higher level than was consistent with what banks would actually come to the window for, given the range of the funds rate that we were expecting. During those first few weeks of this intermeeting period we would make adjustments, particularly if it went well into a reserve maintenance period, for what was turning out to be a lower level of borrowing by \$200 or \$300 million as this period went along. And as that persisted week-after-week the decision was made--we consulted with the staff and the Chairman on it--to make this downward technical adjustment in the level of borrowing used in the path, but we were not expecting that to be accompanied by any change in the range of expected funds rates.

MR. HELLER. No, I understand that. But it is not formally indexed or linked to any other variables.

MR. STERNLIGHT. No, no.

MR. HELLER. Okay. I thought you had some construct there.

MR. STERNLIGHT. I said indexed because it was indexed to a degree of pressure that we expected to be associated with [a certain] range of federal funds trading. It's indexed in that sense.

MR. HELLER. Thanks.

MR. STERN. Peter, you may already have answered this indirectly, but in view of the widely recognized problems in the relationship between borrowings and interest rates I wonder if some market participants believe now that we're targeting the funds rate?

MR. STERNLIGHT. I think they certainly realized that we have had problems with it. Periodically I see things suggesting that they think we are getting back more to the use of borrowings but probably

not all the way back to where it was, let's say, prior to the stock market crash--which was the time of the major departure.

MR. STERN. I said rates; you said borrowings.

MR. STERNLIGHT. Sorry. Maybe I twisted that around. But they think that we are--

MR. STERN. Getting back to a rate.

MR. STERNLIGHT. Getting back toward use of borrowings.

MR. STERN. Okay.

MR. STERNLIGHT. I think we're getting back toward the borrowings but [not] all the way to what we were pre-October '87.

CHAIRMAN GREENSPAN. Further questions for Mr. Sternlight?

MS. SEGER. There was an article in the paper about Salomon Brothers taking big hits in their government trading.

MR. STERNLIGHT. Yes.

MS. SEGER. Given their level of expertise, etc., and what you said about the people in the markets expecting us to tighten further how could they possibly have taken such gigantic loses?

MR. STERNLIGHT. As I understand it, Governor, it was not so much a bad bet on what was going to happen to the general level of rates but rather some sophisticated rate spread movements that they anticipated that just did not pan out as they expected. That's not to say I agree--

MR. JOHNSON. They probably believed the long-term rates were going to rise.

MR. STERNLIGHT. It's surprising to see as sophisticated a participant as they are coming up on the wrong side on that. I will say that in the past couple of years when, in general, the government securities dealers have had a pretty rough time that firm drew on perhaps a more sophisticated view and a better knowledge [of the market] and has fared better than the pack by a fair margin. I'm really more concerned about a great number of other dealers who seem really unable to hack it with the current degree of competition in the government securities market.

MS. SEGER. The only reason I mentioned Salomon Brothers is that that was the firm that happened to be featured in the news item. But I imagine--

MR. STERNLIGHT. Yes, they did have that big hit from a bad bet on what was going to happen to the shape of the yield curve.

MS. SEGER. Thank you.

CHAIRMAN GREENSPAN. President Syron.

MR. SYRON. Peter, how widespread are these exotic--if I can use that term--hedging strategies that Salomon had in place? Are there many other firms that have things that are [that complex]? Obviously, there are varying degrees of complexity, though. Would they have the edge in terms of the complexity of their strategies or are there others that are operating--

MR. STERNLIGHT. No, I think there were many firms that engaged in those strategies, though probably in lesser dollar magnitudes than Salomon Brothers. But I don't think it's at all that unusual to the degree--

MR. ANGELL. Well, it really isn't an exotic hedging strategy; it's an exotic speculative strategy, I think. You really have to distinguish between an exotic speculative strategy and an exotic hedging strategy. There's quite a difference.

CHAIRMAN GREENSPAN. In a total [unintelligible] it turned out--

MR. SYRON. It may be a [unintelligible] distinction.

MR. JOHNSON. I don't know that you look [unintelligible].

VICE CHAIRMAN CORRIGAN. [Unintelligible] on a hedge.

MR. JOHNSON. Well, by definition a hedge is a hedge. It just depends [on whether it was] something they thought was a hedge.

MR. SYRON. They may have thought it was a hedge in priority.

MR. ANGELL. But anyone who finds the hedge [unintelligible]. They just have to have more expertise than that. So, I think they were taking a position.

MR. STERNLIGHT. Further questions for Mr. Sternlight? Would somebody like to move to ratify the actions of the Desk?

VICE CHAIRMAN CORRIGAN. So move.

MS. SEGER. Second.

CHAIRMAN GREENSPAN. Without objection. Peter, would you like to raise your [leeway question]?

MR. STERNLIGHT. Thank you, Mr. Chairman. In the upcoming intermeeting period, current projections suggest a maximum reserve need on the order of about \$7 or \$8 billion. The main factors we think will be increased currency in circulation, higher required reserves and, by early May, some rise in Treasury balances at the Fed. While some of this can be met with repurchase agreements, which do not count against leeway, I believe it would be prudent to enlarge the standard \$6 billion intermeeting leeway temporarily by \$2 billion to \$8 billion.

CHAIRMAN GREENSPAN. Would somebody like to move the leeway?

MR. HELLER. So move.

VICE CHAIRMAN CORRIGAN. So move.

CHAIRMAN GREENSPAN. Without objection. We now turn to the economic reports. Messrs. Prell and Truman.

MR. PRELL. Thank you, Mr. Chairman. [Statement--see Appendix.]

MR. TRUMAN. [Statement--see Appendix.]

CHAIRMAN GREENSPAN. Questions for either gentleman?

MR. JOHNSON. A couple. One: Just looking at the forecast, which has been revised since last time although it's not dramatically different, you have real GNP slowing significantly by the third quarter of 1989. It averages about 1.2 percent from the third quarter of 1989 through 1990. We have gotten into these arguments before about what potential is but I think everybody agrees that that's well below whatever anybody is thinking of as potential. And that's for a fairly significant period of time. Yet we don't see any improvement on the inflation side. The lags are longer I guess than would show up on here. But exactly what do we expect, ultimately, on the inflation rate from a forecast that has that kind of slack built into it over a prolonged period? Clearly, it's not showing up in the numbers here. When does it show up?

MR. PRELL. Let me say first that it takes a period of below potential growth in order for some slack to open up in the labor market in particular. But also, we'd expect to have some slack--

MR. JOHNSON. I know, but there's a year of that kind of slack. And I just wondered--

MR. PRELL. But, as you know, in our forecast that only brings the unemployment rate up to about 6 percent. The maybe "worst case" interpretation of the events of the last two years is that that's only getting us back to the natural rate--if you want to use that framework for looking at this. We have been implicitly a bit more optimistic in the sense that, as we move up to the 6 percent neighborhood and edge above it by the end of 1990, we are anticipating that we will begin to see some tendency toward moderation in the underlying inflation trend. And thus in 1991, if the unemployment rate remained in the low 6 percent neighborhood, by bringing growth up to, say, the 2 percent range we would anticipate that we would begin to discern a very gradual deceleration of inflation. But it would be measured in fractions of a percent for a year at that level.

MR. JOHNSON. But if you're just saying that we're moving to the natural rate why would you get below potential growth on that?

MR. PRELL. Well, to raise the unemployment rate you have to move below potential growth. In recent years it has been very clear that on average the economy had to grow less than 2-1/2 percent in order to produce an upward movement in the unemployment rate.

MR. JOHNSON. Yes, I know I'm--

MR. PRELL. Our judgment is based on what we've seen in wage and price behavior. All the anecdotal evidence over the past year or so suggests that in essence we have overshot a level of resource utilization that's consistent with stable inflation.

MR. JOHNSON. Again, what happens ultimately? What is the ultimate inflation path that we get out of this scenario?

MR. PRELL. Well, in 1991 we'd expect to see a fractional decline in the inflation rate barring any exogenous shocks that we obviously can't anticipate at this point.

MR. JOHNSON. There is one other point I wanted to ask. I asked this last time but I'll ask it again. I was looking at our forecast compared to the Bluechip consensus. I know what was circulated showed some other forecasts besides the Bluechip one, but those are all contained in the Bluechip so I'm comparing that one with ours. We have very similar forecasts on real GNP and inflation. But once again they expect a decline in short-term interest rates by the second quarter whereas we're saying they need to go a percentage point higher. Any comment on that?

MR. PRELL. I don't think we're totally outside the spectrum of outside forecasters, but there continues to be some difference of opinion between the staff and that average in terms of how much weakness is likely to occur in aggregate demand as a consequence of the tightening that has occurred already. I noticed in the article in The Wall Street Journal the other day on the difficulties in economic forecasting that one person commented that it appears that the business forecasters keep predicting recession about a year out and then moving it back as it doesn't materialize. In essence, there's a large element of that: a sense that we have had a long expansion; things have gotten tight; and it's more likely than not that we may have a downturn. And they perceive it occurring by the end of this year, in many cases with interest rates moving down along with it. They also tend to have a seemingly relatively rapid disinflation response to that softening--greater than we would anticipate. And that's part of the difference in our views.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Ted, considering the strength of the dollar in the past year and your comment that you think the dollar will remain relatively firm in the near term, why wouldn't it be reasonable to expect that any significant improvement in net exports would be delayed to the second half of the year at the earliest and most likely to 1990?

MR. TRUMAN. I don't think we have much improvement in the second half.

MR. PARRY. Well, you have improvement over the year going from \$103 billion, which of course has been revised. But the change is from \$103 to \$85 billion; that's not [unintelligible] \$18 billion.

MR. TRUMAN. Yes, but some of the changes have to do with special factors in the last quarter of 1988 when there was a deterioration, some of which was caused by a surge in oil imports and

probably a surge in nonoil imports associated with the buildup in [inventories]. So, you take that out and that's where much of the improvement comes on the trade side in the first half of the year.

MR. PARRY. It's still \$13 billion.

MR. TRUMAN. What?

MR. PARRY. \$98 billion to \$85 billion is still \$13 billion.

MR. TRUMAN. What I mean is that while there is a small improvement in there most of it is a bounceback from the fourth quarter on the trade side.

MR. PARRY. But when--

MR. TRUMAN. And there is a small adjustment in the--

MR. PARRY. Wouldn't typical statistical studies lead you to expect an actual deterioration?

MR. TRUMAN. No, because we think that there still is some effect in the pipeline from the delayed effects of the dollar decline and we have built some of that in there. So that's consistent with the models and the equations that we use in terms of those effects. And then we add on the special factors like oil and agriculture--to the extent that there's a rebound this year in agricultural exports in real terms, in comparison to the flat performance last year--and that's what gives you some of the improvement.

MR. PARRY. Would you say there's perhaps a greater uncertainty in this area than in some of the other areas of GNP performance?

MR. TRUMAN. I've always felt there's a lot of uncertainty. That may be because I've been closer to it. But I think that Mike sends me his gospel truth and he's always right.

MR. PRELL. And vice-versa.

SPEAKER(?). One of you is making a mistake.

MR. PRELL. Well, there's a lot of uncertainty on all aspects of the forecast.

MR. PARRY. Thank you.

CHAIRMAN GREENSPAN. Doesn't it bother you that implicit in this scenario is an increasing willingness to [acquire] direct claims on the United States? If you extrapolate to what seems to be going on, what turns it? In other words, I assume the long-term rate differential is what basically is driving the models. Are we expecting that the long-term rate differentials will narrow in the next recession or the next month?

MR. TRUMAN. That is what it is basically. As you know and others who have looked at it know, the equations for exchange rates just barely qualify as equations in the statistical relationships--

CHAIRMAN GREENSPAN. They're better than anything else I've seen.

MR. TRUMAN. Well, as we get over this peak and the economy softens a bit--this is basically what Governor Johnson was commenting on in terms of the Bluechip forecast--we have U.S. rates coming down in 1990 and coming down relative to rates abroad. No matter what model you put that through, that gives you essentially a differential effect. It could differ with regard to how much you get in the short run on the one side. But the changing effect comes from the change in the influence of the interest rate differential on the exchange rate. In a sense we pushed aside the fact that you get very little improvement in nominal terms over this period. And we are assuming, maybe based in some sense on recent experience, that the market will continue to finance us about--

CHAIRMAN GREENSPAN. President Syron.

MR. SYRON. Mike, I just had a question, which I think I know the answer to. Regarding the rate increase that is implicit in the Greenbook forecast: Is that essentially a straight line linear forecast throughout the year?

MR. PRELL. Well, we wouldn't want to be any fancier than that. We just have a gradual further rise.

MR. SYRON. I guess the second part of the question I'll put off until later. But I'd be interested in speculating if it wasn't a straight line increase whether the potential impact of that was of importance.

MR. PRELL. I think what we have built into the remainder of this year is not very large. In fact, I will venture to say that it might not be large enough, given the range of possibilities one can see here. But to make distinctions on whether you've gained this increase of roughly a percentage point through a 3/4 point rise over the next three months and a 1/4 point rise thereafter versus 1/4 point and then 3/4 point I think is going well beyond anything that economic science can discriminate between.

MR. SYRON. The second part of my question relates to the questions Governor Johnson asked. In your model, is it fair to say--and this leads to the risks--that you don't see us getting below the natural rate until somewhere around the second quarter of 1990?

MR. PRELL. Well, I don't want to speak of models per se here. The models we have been looking at have a longer history of price/wage behavior and would suggest that the natural rate is above 6 percent. However, our interpretation of the errors those models have made recently and of recent evidence leads us to put together a forecast that, if you forced it into that kind of model, would imply a considerably lower natural rate. So, we are in the vicinity of that implicit natural rate by the middle of next year.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. If you look at many models in their unadjusted state--just running the pure models whether they're monetarist or

[unintelligible]--over a fairly broad spectrum they tend to come up with a negative growth rate in the first half of next year. And then you judgmentally massage the models. The main difference that I can see is whether the conditions that are implied tend to have no recession. How confident are you that the no recession scenario is judgmentally right--that it will prevail over the simple unfettered models?

MR. PRELL. Well, there's hardly anyone who runs an unfettered model forecast. You're always confronted with the fact that models have imprecisely predicted the recent past and you need to make some corrections in order to move forward in the forecast period. Our models, for example--the quarterly model and the P* model--have tended to underpredict the strength of aggregate demand in the economy over the past year or so. If you immediately eliminated that and had a pure model forecast moving forward it would suggest a sharper weakening than we have in the forecast. But whether that's the most plausible assumption to make is a question. Certainly, we [would] be inclined to make that kind of adjustment. The basic question, though, is whether the outlook contains a significant risk of recession. In this Greenbook we deviated from what we had done the last couple times--just to avoid needless repetition perhaps--but maybe it is useful to state again: we are skirting zero growth here by a small margin in what we've written down. And certainly a small hiccup in the economy in an adverse way could tip this into negative territory. So I would say that with this kind of outlook there is a non-negligible risk of at least a mild downturn in the economy.

MR. KOHN. Governor Heller, I could add that we do run some what we call St. Louis-style reduced form equations on monetary aggregates and they do show slower nominal income growth than the staff projection for 1989 and 1990. But they showed substantially slower growth, particularly in the M2 equation, in 1988 than we got. And they made huge errors earlier in the decade, in '85 and '86. On the other side, they had much faster GNP growth, say, in--

MR. HELLER. How low do they get there?

MR. KOHN. What?

MR. HELLER. How would you describe the path at the beginning?

MR. GUFFEY. In '89, how weak?

MR. KOHN. How weak is it? Let's see. For nominal income growth in 1989 it has about 4 percent.

MR. HELLER. And real?

MR. KOHN. I don't have it broken down; this runs off the nominal model. But running it using the base I have 9 percent or so [nominal]. But they have all been making such huge errors that I would have skepticism about--

MR. HELLER. Well, the skepticism is whether the errors will average out over the--

MR. KOHN. At the end of a certain number of decades, right.

MR. PRELL. It sounds like we're somewhere in between those two in our '90 forecast in nominal GNP.

MR. HELLER. Thanks, Don.

CHAIRMAN GREENSPAN. President Forrestal.

MR. FORRESTAL. Mike, I was curious about the real disposable income number that you have in the Greenbook. The second quarter shows considerable weakness. I know the nominal personal income number doesn't change very much. Is there a special factor there?

MR. PRELL. I'm sorry I didn't catch the change that you were referring to.

MR. FORRESTAL. The real personal disposable income in the second quarter of '89 would be quite weak.

MR. PRELL. Well, there are some special factors boosting the first quarter and some of those, like drought relief payments, won't recur in the second quarter. The growth in the first quarter is also boosted by things like Social Security but that's a level adjustment, so to speak. We are expecting a considerable slowing in employment growth and in hours in the months ahead. And that plays a significant role in the outlook for income growth.

MR. HOSKINS. Mike, let me ask you Governor Heller's questions perhaps in a different way. And that is: How would you assess the risks of forecast error with respect to inflation? Do you have a symmetrical risk on either side or are we more likely in your view to exceed it on the up side or the down side?

MR. PRELL. I think it's fair to say that the recent data-- and as I indicated we've raised our forecast of the price indexes for the current quarter--leave us with the impression that the inflation pressures at these levels of resource utilization may be a little greater than we had anticipated. But we haven't made a dramatic change here. We have tried to read through some of the noise in these numbers. And we've only passed through a modest bit of this surprise into the forecast for the next two years. I characterized the situation last time as being one where we think this inflation forecast represents our best point estimate. But if I were to draw the probability distribution, my sense is that the distribution has a longer tail on the up side than on the down side. I could envision a percentage point more inflation more readily than I could envision a percentage point less inflation over the next year or so. That doesn't mean that there's a strong likelihood of that happening; but in that sense I think the risks may be a bit on the up side.

MR. HOSKINS. I'd like to just follow up. Since Don raised it, I want to know what base growth you had to get 9 percent nominal.

MR. KOHN. Actually, I think we have projected about 4-3/4 percent base growth. That model, the base model in particular, has done so poorly that I really shouldn't even have cited it. The errors have been in percentage points.

CHAIRMAN GREENSPAN. [There are questions about] the appropriate numerator, I think, on velocity with the base--if you pick up a good chunk of economic activity outside the United States, some of it illegal.

MR. KOHN. Right.

MR. HELLER. A lot of that activity is in the District of Columbia as well.

CHAIRMAN GREENSPAN. Yes, but they do use American currency last I heard. President Melzer.

MR. MELZER. Mike, I wanted to ask if you had any insight into what's going on with short-term business credit--that there's some strength apart from the LBO situation.

MR. PRELL. I can't slice this too finely; it's very hard to trace that. In the Greenbook we referred to numbers where we've taken away the large corporate merger transactions that we can identify and gotten some additional information there. There are so many corporate restructuring transactions going on that there may be a lot of other things going on in the numbers besides basic financing and capital expenditures and so on. Our reading is that there has been some strength in short-term business credit apart from the RJR/Nabisco and other major merger transactions. And that probably is reflective of the underlying need for funds and the deferral of long-term financing. Some of the long bond issuance that Peter talked about earlier really isn't very long term; much of it has been swapped into floating rate obligations. It just appears that businesses are not anxious to lock in these current long-term borrowing costs which, again, is consistent with the term structure picture and these forecasts of weakening in the economy and lower interest rates down the road.

MR. MELZER. Thank you.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. Maybe you can get rid of some confusion I have. I always thought that the housing industry was very sensitive to credit conditions and interest rate movements, and so forth. I see what has happened to interest rates in the last year and I hear the forecast of another percentage point to be tacked on, yet I see housing starts for the calendar year 1989 actually estimated at a touch above calendar 1988--if I'm on the right line, it's 1-1/2 million versus 1.49 million. And then the following year it's 1.44 million, with the weakest quarter not being any worse than 1.43 million. I guess I just need to have that put together for me. How, with these interest rates, would you think that the home construction will not be any weaker than that?

MR. PRELL. Well, to date, the effects on housing starts have been negligible. I think housing starts were confounded a bit by the weather that boosted the January figure to such a high level. February is in the area of more than 1-1/2 million. Interest rates have already risen a good bit. We don't have a gigantic further increase in mortgage rates in this forecast, so this kind of decline--given the underlying demographic influences and so on--looks to us to

be fairly reasonable. I don't think we are all that far off. Given what other forecasters have been anticipating in terms of interest rate movements, I don't think we're that far off the beaten track on the housing starts outlook. Perhaps we're being a little optimistic. If we had a much larger mortgage rate increase it would obviously make a difference. But it's not very large at this point.

MR. PARRY. Governor Seger, one other perspective that perhaps I can provide on that: If you take the California market, which represents a fairly significant share--

MS. SEGER. Assume everyone's moving to California--is that it?

MR. PARRY. No, I said it's a fairly significant share of the total housing market. We have had increases in the prices of single-family homes that have averaged 25 to 30 percent in the Los Angeles and San Francisco markets. I think there are some consumers that look at that on a total return basis and figure out that 11 percent is not such a bad deal if you can count on increases in prices of that magnitude. I think that's had an impact in our state. I don't know if--

MS. SEGER. Yes, but the others--

MR. HELLER. Mike Kelley wants to speak.

CHAIRMAN GREENSPAN. That's an interesting issue because the real interest rate there is to be adjusted not by general price levels but by the price of the asset to which it is applied.

MR. PARRY. Right.

CHAIRMAN GREENSPAN. And there as you're saying--you don't mean in California that it is literally negative at this stage but--

MR. PARRY. Well, all I know is that the average price in the two markets that constitute most of the area has gone up about 25 to 30 percent in the past year.

CHAIRMAN GREENSPAN. Well, that's not the projection.

MR. PARRY. No. And one has to figure out what people are projecting.

MR. PRELL. I think we've seen in some parts of the Northeast that this doesn't go on forever--that you get an affordability problem after a while because the mortgage payment just is unmanageable. But it is a mixed picture regionally, and that's one of the problems in forecasting housing activity. It clearly has been a problem in the last year. We've had very divergent and changing market conditions. We try to sort through all of that as well.

MR. SYRON. Consistent with what Bob [Parry] said, you get this responding sort of with a lag. In New England now we're seeing lower housing activity than you might expect, considering other variables, because with the rate of appreciation having declined substantially--it has actually gone negative in real terms--people are

buying housing only for shelter. They are not buying it any longer figuring that it is an investment as well. So, at some point it sort of falls off a cliff in a sense, and you get a strong negative reaction to the whole thing.

CHAIRMAN GREENSPAN. Well, that's what will tilt the housing market down. If all of a sudden there is a perception that residential property values are easing then all of a sudden, whatever the nominal mortgage rate is, it will grab--

MR. PARRY. That's right.

MR. PRELL. I might just note one of the surprises recently: we haven't gotten too excited about this yet, but we have been surprised by the firmness in the multifamily sector. And we notice that there has been some downturn in vacancy rates in some locales. We have a sense that there is a very old stock of apartment buildings out there and some demographic pressure. It may be that there is some considerable resilience in the apartment part of the market.

CHAIRMAN GREENSPAN. Bob, I assume that the 25 percent increase is a nominal increase in price and that it has the same problem that the national figure has in picking up a significant increase in the average size of homes and improved quality. So, the adjusted price level is not going up anywhere near that level.

MR. PARRY. We do not collect good data on that. I don't know how much that has changed and how much of a factor that is.

CHAIRMAN GREENSPAN. We do know in the national figures that it's very significant. And since California is such a big part, clearly, it's got to be an issue there. President Guffey.

MR. GUFFEY. Thank you, Mr. Chairman. Mike, how much of the decline that you're showing in your forecast for 1989 and 1990 from last time is attributed to your assumption of an additional one percentage point increase in interest rates?

MR. PRELL. We haven't really made much of a change from our last projection. Using the model--which I've already indicated is an imperfect predictor of these responses--if you took out the interest rate increase and just held the funds rate stable the model would take off maybe 1/3 of a percent in real growth this year and something over 1/2 a percent next year. That means that we still would have a perceptible weakening in growth and likely some slight edging up in the unemployment rate.

CHAIRMAN GREENSPAN. Ted, can I ask a question on the effect of the rise in the oil price in the last couple of weeks on the Saudi Arabian fiscal situation? A couple of weeks ago, as I recall, it looked as though the rapidly deteriorating fiscal situation in Saudi Arabia and the pressures on the oil price would likely come, with the Saudis having to increase their liftings to meet their revenue requirements, which would accelerate the price level decline. Is there any way of making a judgment as to whether the recent runup in spot crude prices has altered the situation in a way in which they need not move the liftings at this point?

MR. TRUMAN. Well, it clearly works in that direction, though it all depends a bit on what one thinks the current meeting will produce for the balance of 1989. I have not seen any reports that suggest that the Saudis will step up production because of their fiscal situation or that they do not need to step up their production because prices have moved up. Posted prices have not moved to the same degree as spot prices, although--

CHAIRMAN GREENSPAN. Yes, but they are still really selling at spot.

MR. TRUMAN. But they have some long-term contracts. It depends on how those contracts are written; that's right. It works in that direction. One of the favorable factors has been the supply disruptions in Qatar; that has tightened the supply side. And in some sense there has been a spillover to the price the Saudis are getting. We have a small step-up in production in the second half of the year built into this. Our guess is that they decided to accept the prices coming down on the assumption that there will be a modest increase--a couple hundred thousand barrels a day--in OPEC production in general in the second half of the year. That's not a big deal. A small increase, on that order of magnitude, is built into what we have and if you parse that out among all the producers--

CHAIRMAN GREENSPAN. If there are no further questions for Messrs. Prell or Truman, shall we open our tour de table? Who would like to start? President Boykin.

MR. BOYKIN. Well, Mr. Chairman, I really don't have any questions or any real disagreement with the staff forecast.

Looking at the District, our recent performance and the near-term prospects for our economy continue to improve. Over the last year and a half the gains in the Dallas District have been concentrated primarily in manufacturing services. More recently, we've seen some gain from the energy sector. The contraction in construction seems to be nearing the bottom. Agriculture remains a bit of a concern, primarily because of the uncertainty of the drought situation. As I've reiterated over the last six months, most of my contacts outside the banking and real estate industries have been sounding increasingly optimistic. I had a group of investment merchant bankers in for a breakfast meeting last week and most of them agreed that the Texas economy and even that of Louisiana, which has been one of the weakest states, are beginning to demonstrate increasing strength. In fact, a few who represent very large companies with considerable capital from both national and international sources are beginning to look upon the region as a ripe opportunity because of the reduced competition coming from the banking sector. On the whole the regional economy is improving but growing slower than the nation. Banking, real estate, and now agriculture are the exceptions to this pattern. Within the District no one is noting price or wage pressures but there have been a few signs over the last two or three months of some shortages of engineers, first in Houston and now in Dallas. Overall, I think we're feeling a little more optimistic down our way than we have for quite some time.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Mr. Chairman, the Greenbook projections look quite reasonable to us. Until very recently we had thought that they were underestimating the amount of economic growth we would have in the economy. But at this point I guess we think the risk of error is about equal on both sides of that. This change in our view is not the result of what we see in the Greenbook or the Beigebook or what we pick up in the way of anecdotal information. To us those sources suggest--if you allow for some downtick in some of the monthly statistics in February because of that temporary weather-induced burst in January and also allow for the sluggishness recently in automobile sales, which may prove to be temporary--that the economy looks pretty strong. What makes us think that the risks really have shifted is that we have taken, we think, some pretty significant policy moves in recent weeks and months. The federal funds rate is up about 3-1/2 percentage points over a pretty short period of time, and we think these policy actions--particularly the most recent ones--have increased the odds that economic activity will moderate later this year just as the Greenbook projects. And these actions significantly reduce the risk that the economy is going to overheat further.

Now, the recent sharp increases in prices at the wholesale level and certainly at the consumer level worry us a great deal as do the indications of upward pressures on wages. And we're deeply concerned about broad increases in prices outside the food and energy area. That suggests that the underlying rate of inflation has risen at least a notch or two in the last several months. On the other hand, the trend rate of growth in M2 has dropped pretty markedly over the last two years and I think that provides us with at least some insurance against a really sharp further acceleration in the underlying rate of inflation for the remainder of 1989. But I would add, perhaps gratuitously, that if we're really going to get inflation down to a zero level I think somewhere down the road we've certainly got to get the aggregates growing at a slower rate than they have grown over most of this two-year period--maybe no slower in 1989, but certainly in a trend sense they have to come down still further if we're going to get to our ultimate goal.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Thank you, Mr. Chairman. The Twelfth District economy continues to experience healthy growth with only a few signs of slowing. Agricultural producers are enjoying high product prices and recent rains have lessened the chances of drought in the area rather substantially. We also hear reports from Western department store executives that sales of soft goods have improved in recent weeks. But I must admit that that may be a reflection of improved weather conditions and also the early Easter season. In the few sectors that we do see slowing it appears as though supply constraints explain much of the change. In Section II of the Greenbook there was a reference to the types of problems that the commercial aircraft industry is experiencing and I was thinking that it's rather amazing that Boeing has signed an agreement with Lockheed to borrow up to 670 Atlanta-based workers for as long as six months.

Turning to the national economy, the level of activity as indicated in the discussion in the Greenbook remains above its noninflationary potential. Strong growth in employment and tightening labor markets suggest that upward pressures on wages are likely to

persist. At the same time, higher short-term interest rates may result in some slowing in the next few quarters. But I must admit that, to me, signs of current slowing are too few to be convincing at this point. Our overall outlook for the economy is really not very different from that of the Greenbook. We also expect the economy to remain above full employment with continuing upward wage pressures for at least the remainder of 1989 and perhaps into 1990. However, we have less strength in our forecast originating in the net export sector, largely as a result of the strength of the dollar that we've experienced during the past year. Thank you.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. With regard first to the District economy, in general things remain in good shape and there haven't been any major surprises or new developments that are worth reporting, with a couple of exceptions. On the side of real activity the one surprise that I've noticed is that nonresidential construction activity is certainly stronger than I would have expected at this point. Major projects continue to be announced and initiated in the Twin Cities and the way things are shaping up it looks like that's going to keep that sector reasonably strong early into the next decade. Labor markets generally remain tight and sectors that had been expanding are continuing to expand. Having said that, I do have the sense from talking to a variety of business people that the rate of expansion has eased a bit. And it's very clear to me that in the last several months, at least, business people are once again noticing interest rates. Interest rates have become a topic of conversation whereas as recently as perhaps four or five months ago that subject hardly, if ever, came up. But that's now back on the agenda. Another subject where the tone of the anecdotal information seems to have changed is cost increases. In the past a lot of business people would tell you about the cost increases that they were experiencing and the difficulties they were having in passing those cost increases through. They will admit now that they're having less difficulty moving those cost increases through. They hardly, if ever, complain any longer about the difficulty in doing so.

As far as the national outlook is concerned, I have little to add. I think there are some signs that we may be approaching a soft landing, at least as far as real growth is concerned. I wouldn't want to exaggerate those signs, given that January was probably boosted by very favorable weather and some backing off in February was almost inevitable. We do run an unfettered model forecast; it's a wholly unfettered [vector] auto-regressive model. And for what that's worth, that does not have a recession in it. It has continued real growth in '89 and '90, and it has that at modest rates. And, at least as far as consumer prices are concerned, it has somewhat more rapid inflation than the Greenbook.

CHAIRMAN GREENSPAN. President Forrestal.

MR. FORRESTAL. Mr. Chairman, looking first at the District, I'm glad Boeing is borrowing some of the Lockheed workers; that will be helpful. There are several thousand Eastern [Airlines] people who are available as well. We haven't seen very much of a change in the Sixth District since the last meeting of the Committee. We are continuing to see moderately good growth, although it's somewhat

slower paced than the national average. Capital spending plans are quite robust in those industries where capacity pressures are evident and that is certainly the case for industries like paper, chemicals, rubber, and all aspects of the transportation sector. Textile manufacturers are also moving ahead with plans to increase purchases of equipment although in that case it's mostly to modernize their older facilities. We do continue to have reports of shortages of skilled labor and upward [wage] pressures for skilled workers. The markets are not quite as tight for unskilled people but even there we hear sporadic reports of difficulty, particularly in fast-food places and in supermarkets. There is considerable concern among people I talk to about the rising cost of benefits, particularly health benefits, and the impact on total labor costs. In addition to that there's a fear or concern about enactment of a higher minimum wage which would push up wages for higher paid labor as well, given the relative tightness of the labor market. As for prices, on the basis of sporadic reports, the information we're getting is mixed. Increases are mixed for industrial inputs, with a greater upward bias than seen a year ago. And it's rather interesting to me that, in connection with prices as well as some other areas, people talk about a lower level of prices over the last month or so but when they compare their prices to a year ago they are still considerably higher.

With regard to the national economy, we don't have very significant differences with the Greenbook forecast. We would have a slightly higher inflation number and a lower unemployment number but those are minor differences; basically we're in agreement. Judging from the Sixth District and from what I see around the nation there is some near-term deceleration in economic expansion, especially if you take into account the fact that we're at full employment and a lot of industries are going full blast and at high capacity. There are two things that continue to disturb me. One is that any slowing that's evident seems to be taken as a sign of real weakness in the economy. I think we've gotten so used to high numbers over the past several years that when the numbers come off even a little people get panicky. On the inflation side the same thing is true. As I've said before, among a lot of people that I've talked to there is kind of an acceptance of inflation at the 5 percent level or even a bit higher. I think that was confirmed when the CPI number the other day came in at .4 percent--which I'm not all that sanguine about--they were relieved that it wasn't at the higher end of the expected range. So in general, I think we have an expectational problem in the economy and in the markets that we really have got to move against. Now, I hope that the economy really is slowing. But as someone said earlier we've been burned on this before. Over the summer I remember a couple of times when we thought there was a slowing and it turned out not to be. So, I'm skeptical that we are really seeing a sufficient slowing to stem the inflationary pressures that are there. And that obviously leads me to a certain conclusion about monetary policy that I'll reserve for the later discussion.

CHAIRMAN GREENSPAN. President Keehn.

MR. KEEHN. Mr. Chairman, I do find this a particularly difficult period in which to assess the outlook. In his presentation I think Mike made the case, which we would agree with, that there are at least some tentative signs of moderation out there. In a national context we reviewed a number of things in the Greenbook. We think

consumer spending, particularly for durables, will be showing some sign of leveling. Growth of exports is certainly short of our expectations, and that would be particularly true for industrial supplies, materials, and capital equipment. The housing numbers are showing some signs of softness; interest rates have had an impact on that. The railroads no longer carry the GNP but nonetheless the year-to-date numbers for rail shipments are certainly lower, particularly for February, than was the case for last year. How much of this is weather-related I think is very tough to tell. January was extraordinarily warm, of course, and February was at least normally cold and the seasonal adjustments may have had an impact on some of these national numbers.

In a District context, we're really not seeing very much of this moderation. The employment numbers throughout the District continue to be strong; we don't see any weaknesses emerging there. The manufacturing outlook continues at a pretty high level. The steel business, for example, is strong. And the steel plants in the Midwest are exporting--admittedly from a low base--but nonetheless that's a new market for them. Machine tool orders are up. Railway equipment--an industry that has been absolutely moribund over the last four or five years--is showing some signs of increased orders. So, in a manufacturing context, it's our expectation that activity in the Midwest this year probably will be running ahead of the national numbers. And certainly the other aspects of the Midwestern economy continue to be pretty favorable. On the inflation side I have thought for quite some while that of course the risks really were, on balance, for higher levels of inflation. I think that continues to be the case; but it may just be possible that we're at one of those times when the balance is shifting a little and that as we go into the upcoming period some of the moderating signs will become a bit more specific. The real question--which we'll be talking about a little later--is how much more we need to do in a monetary policy sense, if in fact we need to do more.

CHAIRMAN GREENSPAN. First Vice President Stone.

MR. STONE. Regionally, the labor markets in the Third District have continued to tighten. The unemployment rate this quarter for the three states represented in the District is estimated to be the lowest it has been in 19 years. We'd be happy to borrow some employees from whatever Districts seem to have some available. Businesses are reporting a shortage of labor across an increasing number of categories and that includes skilled and unskilled workers. And we're starting to hear about shortages in the professional area, including engineers. Prices and wages continue to increase at levels above the national average. We also see some early signs for our regional outlook of more moderate growth in the near term, but not a level moderate enough to reduce substantially the pressures on both labor markets and prices.

On the national scene, we feel the staff estimates are relatively reasonable. We probably see more risks on the up side, particularly for inflation. That concludes my report.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. Let me start with a couple of impressionistic or anecdotal comments. My sense is that most people in the business community that I talk to associate themselves with the view that there are these straws in the wind that the economy may be settling down a bit. But I think it's almost universally true that they would tend to be in the soft landing camp in that I have absolutely no suggestions [from them] of any accumulating downturn or anything even remotely resembling recession or remotely indicative of that. There is, I think, especially among major industrial companies, far less conviction today than there was three months ago about the prospective strength of exports. Some of that is exchange-rate related but, seemingly, a lot of it is not simply a reflection of exchange rates; there's a combination of capacity constraints and other considerations as well. But certainly there is less conviction about the near-term strength of exports than has been the case. Even has changed his tune, Alan, quite perceptibly.

The anecdotal material on the inflation side is, frankly, a bit sour right now. Virtually all companies--small and large--that we've talked to in the recent past do point to both labor and nonlabor cost pressures. And consistent with Gary's comment [they report] less difficulty in passing costs through. I don't think I would characterize these impressions as symptomatic of a 1979-80 type outburst of inflation. Nevertheless, I think the perception is there that the pressure is greater. One little tiny vignette that's germane: our small business and agricultural advisory committee members were talking last week--and this really shocked all of us, I think--about wage increases as high as 9 and 10 percent. Presumably, because these are small companies these are not wage increases as much as they are increases in hiring rates. In other words, when they lose employees they have to go out into the marketplace and replace them. And I think the thrust of their comment was that, in at least some cases, replacement rates are now 9 or 10 percent above prevailing rates for existing employees. So it's not a wage increase in the usual sense of the term but I think it is symptomatic of quite tight labor markets throughout the District, including most of upstate New York at this point.

The other impression that I pick up an awful lot lately--and I think it's just worth repeating--is an almost universal skepticism, bordering on cynicism, about the outlook for budget deficit reduction plans, as they may or may not emerge over the weeks ahead. Again, it doesn't matter whether you're talking to small businesses, big businesses, upstate, or downstate. There really is a growing concern that nothing seems to be happening. Whether the Administration's quiet diplomacy will produce something is another question. But I think it is a matter of increasing concern.

As far as the forecasts are concerned, the New York staff forecast for 1989 in terms of GNP, real GNP, and indeed almost all the components of GNP, is virtually identical with the Board staff's forecast. The only major difference we continue to have is on the inflation side. Depending upon which index you look at, our inflation rates are a half--

MR. GUFFEY. Jerry, would you speak up a little? We'd like to hear what you're saying.

VICE CHAIRMAN CORRIGAN. I'm sorry. The only material difference in our staff forecast versus the Board staff's forecast is on inflation. That has narrowed a bit but we still have inflation rates in 1989--depending upon which index you look at--that are 1/2 to 3/4 of a point above the Board staff's forecast. That still seems to reflect, primarily, a different view on markups. Mike's forecast still has a small negative spread between, say, the deflator and unit labor costs and ours continues to have a small positive spread. But when you add the two of them together it comes out to 3/4 of a point difference on the high side in our forecast. In 1990, for whatever weight one wants to put on a 1990 forecast, there's a fairly sharp difference between the Board staff's forecast and ours. We don't have as much of a slowdown in domestic demand as they do. And we have the external adjustment process essentially flattening out and indeed deteriorating a little. So there's a quite a sharp difference in 1990. I don't put any more weight on those forecasts than Ted Truman does, but to get back to the point the Chairman raised earlier--whether you take the staff's forecast or our forecast for '89 and '90 on the external side--both imply an increase in U.S. net external liabilities in balance sheet terms of about \$275 billion for the two years combined. And I must say as an intermediate- or medium-term policy problem I am getting more and more concerned about the implications of anything even resembling that kind of a result for the two years running.

With regard to the near-term growth prospects in the economy, my sense of things, Mr. Chairman, is that under the best of circumstances the near-term inflation numbers are going to be bad. And if the economy is simply pausing rather than trending down they could be terrible. So an awful lot does ride on the question of how much weight one should give to these signs, however tentative or firm one may think they are, as to the near-term course of the economy. Just one last point on the price side: Mike and Ted talked a fair bit about oil prices and Governor Angell will probably talk a bit about commodity prices. But one thing I did notice in looking at commodities is that stocks of a very wide range of agricultural and industrial crude materials are at quite low levels right now. I'd simply observe that if we don't get some rain in some parts of the country pretty soon that could further complicate the near-term outlook on the price front.

CHAIRMAN GREENSPAN. President Melzer, why don't you start off by telling us about rain in your area?

MR. MELZER. It's not a problem; we even had a foot of snow three weeks ago. I think Roger might have something to say about that. In terms of the District numbers, the most recent reported activity is very strong both relative to what we've been seeing lately and also compared to the national numbers. In general, the more recent anecdotal information would tend to confirm that. The general sense I get is that orders are growing, albeit at a slower pace, and that there is some weakness in the consumer area but the commercial area is still quite strong. In particular, we're seeing strong manufacturing employment growth and the industries that you see there are transportation, textiles, food products, and chemicals. On the transportation side--just picking up on what Bob Parry said--a fellow from mentioned to us the other day that they have a five-year order backlog in commercial aircraft and I think half of

their workforce has about an average of one year's experience on those particular assembly lines. He did go on to say that the order backlog includes options--I think they call them reservations--so that some of that could fall away. On the textile side, where we've seen some strength as well, a textile manufacturer who had just returned from the Far East mentioned that, looking at Korea for example, between what's happened to their currency and wage rates domestically in Korea they're looking at cost increases of 25 percent in manufacturing there. And to a lesser extent that's happening in Hong Kong and Taiwan. So, in particular types of products the United States is much more competitive.

In terms of other insights of an anecdotal nature, the general sense I get is that people--whether they are in a commercial business or even in a consumer business--really feel that they are under a great deal of margin pressure. Raw material prices are up a lot, as somebody said, over the last year. I think the increases have slowed down recently. There is some sense of potentially growing wage pressures. And certainly in businesses where they're selling to original equipment manufacturers there is still a great deal of difficulty passing along price increases. But they will try to work both ends of the costs savings, passing along increases where they can.

In terms of growth in orders, clearly the sense I got is that [the rate of] growth has slowed down in the last couple of months but orders are still growing. I've heard of no cancellations as yet, but reading between the lines I sense a little anxiety about the possibility of cancellations. In a similar vein on receivables, one consumer products company mentioned that they are really taking a very close look at their receivables, which have been growing; and they noted that now 20 percent of the companies they sell to have been involved in LBOs. So, they view the quality of their receivables as really quite low and they are looking at that carefully.

On the national front, my observation would be--just going back a month ago--that our forecast in terms of the result was very close to the Board staff's but it presumed roughly 4 percent M1 growth over the forecast period. Clearly, to the extent that we have very low money growth, people who prepare [our forecast] have become increasingly concerned about whether or not things are going to work that way. In a sense that leads me to a bit of concern, to the extent that in our discussions here we tend to focus on current inputs and whether or not we see weakness and how we try to trade that off against price pressures. In a sense I think there's a trap in that process in that it doesn't really take into account some of the inherent lags in policy. By the time we see the weakness it could be too late; and when we do see the weakness we probably will continue to see price pressure. What do we do then? If you look back to the discount rate increase, to some extent the market in effect demanded that, in my view. I'm not saying we wouldn't have done it anyway, but in a sense I don't think we had a choice because the perceptions out there were basically that we were going to respond to these short-term inputs. So, I think at some point we have to introduce into the dialogue something else to look at that can be a guide. In general, I would just urge that we not ignore what's going on with the aggregates. We all know we set a target on M2 and we know where that stands: it's a little below the lower end of the cone. I'm sure you

all recall my proposal for a [monetary] base growth constraint. In the fourth quarter that grew at less than 5 percent, which is what I suggested as a lower bound; this quarter it's probably right around 5 percent. I took a look at reserves and I was interested in what I found there. If you go back to '79 we've only had two quarters over that entire period of negative reserve growth: one was the fourth quarter of '88; the other was the third quarter of '87. And as you know from the Bluebook, we're putting together a second back-to-back quarter of negative reserve growth of fairly substantial proportions. In any case, I just think that as we contemplate policy actions we have to consider not only what's going on in the economy currently but also some gauge of the thrust of our actions and the lagged impacts they are going to have.

CHAIRMAN GREENSPAN. President Syron.

MR. SYRON. Well, maybe it's because I'm sitting next to Bob, but the New England economy sort of performs inversely to Texas. I'm not sure whether there's any causal relationship. Contemporaneous measures of the region's economy are very strong: an unemployment rate of 3.2 percent; personal income still growing at faster than the national level. But if one looks a little beyond that, particularly using anecdotal information from talking to people, there are certainly signs of a number of areas where there are problems. Manufacturing employment has been declining in absolute terms for some substantial period of time. There was some mention of the computer industry on a national basis; that's reflected to an even greater extent in New England. One of largest employers, Digital Equipment Corporation, had a very major decline in its stock price last week that reflected some problems they had in earnings. Consistent with that, we're seeing that wage pressures are still pretty strong at the unskilled end of the labor market. At the skilled end of the labor market pressures seem to be abating somewhat from what has happened in the past. But going beyond that there is a variety of things that I think are going to lead to some further relative slowing in the New England economy. We have serious tax problems in three of the six states that account for about 80 percent of the population and 80 percent of the economic activity in the District. There are incipient problems in the banking sector. Delinquencies have risen. Actually, it's the ultimate in anecdotal information, but in last Sunday's papers we had three pages of ads for single-family houses, which is unusual for us. Granted, they were big ads so they end up taking a lot of space. But interestingly, particularly in the housing area, I think what's driving it is not rates so much as this realization that people are no longer going to buy a house at \$600,000 and then two years later turn around and sell it for \$800,000. That's what we were talking about before--Bob Parry's point that people are buying shelter. I would maintain that much of what's going on in New England does not really reflect monetary policy or overall constraints in the national economy. It's sort of supply constrained and relative costs have gotten so high in the District; and actually, it's a very small District in terms of its weight nationally.

In terms of the national economy, we too don't differ very much--hardly at all--[with the Greenbook forecast]. I have some slight difference with the unemployment path of the staff forecast and agree very much with the tone of the comments that Mike Prell made this morning. However, I find those projections somewhat

disconcerting--not in the sense that we don't agree with them but that they imply that we have a very difficult situation before us in that we know inflationary pressures are there. It seems to me there isn't much question about that, regardless of what we do right now. And while there have been some--to be different I'll use the word "reeds"--in the wind of a possible slowdown, I don't think we've seen any broad signs. We have certainly seen substantial increases in personal income; we don't know how that's going to be reflected later on. There really isn't any convincing evidence of a substantial slowdown, so we are rather dependent on a forecast for that. And the Greenbook forecast--which I'll say again we have very little problem with--shows, even taking out the drought in the second quarter, fairly strong rates of growth. There was discussion about what the natural rate is. I think that we're in a difficult position where if one does believe that the risks are not symmetrical, the risks would lead one to want to be more conservative.

CHAIRMAN GREENSPAN. President Guffey.

MR. GUFFEY. Thank you, Mr. Chairman. With respect to the District economy, it continues to improve albeit at a rate somewhat slower than the national rate of growth. The strength comes largely from the agricultural and manufacturing sectors whereas the weakness is where it has been in the past couple of years--in the energy and construction areas. There is an event that I think is worth noting that somebody spoke of a moment ago, and that's the drought. That will affect portions of the Tenth District, largely an area from about the plains in Kansas to the northeast through Kansas, northern Missouri, and portions of southeastern Iowa and western Illinois. If we do not get rain, some generous spring rains, fairly soon the agricultural situation will be fairly grim. For example, in Kansas about 3/4 of the wheat crop is now estimated to be either poor or very poor, which are two of the lowest categories of estimates of that particular hard winter wheat crop. The one event that was frightening occurred about two weeks ago--and I suspect most of you know this--when there was a dust storm that was created by 50-60 mile per hour winds that actually darkened the sun in midafternoon in Kansas City. In fact, there were some street lights that came on. I happen to be old enough to remember the 1930's dust storms and this was very reminiscent of that. It happened to be [only] one day; nonetheless, if there is no rain through that belt that I just described I think we will have very serious problems. The estimate of food prices, for example, might be way off. Beyond that, there is strength in the manufacturing sector, and I'm thinking primarily of general aviation. Auto production, up until a couple of weeks ago at least, was going full bore with auto plants operating at two full shifts. That would appear to be slowing now; I don't know what's going to happen in the future but there is a very large inventory, as you know, of unsold autos. The energy sector shows little or no improvement. As a matter of fact, it continues to decrease in terms of exploration activity. It has always been thought that a price around \$17 a barrel would regenerate the interest in exploration; but the uncertainties about OPEC and what may happen to oil prices simply are keeping those individuals out of that particular activity and the number of active rigs that are drilling continues to decrease.

With regard to the national outlook, there is no real difference between the staff forecast and our own for the horizon of

the forecast with the exception that we're a bit stronger on both growth and prices. In fact, there is some encouraging evidence that has already been cited with respect to a slowdown. But it isn't very convincing, at least yet. I think we still have to wait for some additional information on that. In our forecast, we'd put the risks on the high side rather than the low side, with rather a bit stronger growth and stronger prices.

MR. HOSKINS. The Fourth District really hasn't changed much over the last year and a half that I've been talking to you about it. It's very difficult to pick up any signs that we have a slowing in the area, either through casual observations, talking with people, or trying to ferret through the data. What we did this time was to talk to a few capital goods producers, which includes firms like Westinghouse and Eaton Corp., and several other basic capital goods producers, to try to get a handle on whether or not they see any change in attitudes among the people they supply. And the answer to the question is simply no. Any weakness that you perhaps see in computers or office equipment is being offset, at least in the District, in very traditional capital goods. The most optimistic person was a guy in the capital goods industry who estimates real [growth] for this year at 6 percent, fourth quarter-over-fourth quarter. It's very difficult to find any signs of weakness in that. Now, to some extent I'm a little surprised that we didn't find more price pressures developing than we did. They all expect to be able to move prices up in the coming year but they haven't moved aggressively as of yet generally. Order books are still good and lead times are in most cases lengthening rather than shortening. So the picture for capital goods expenditures--at least what the producers in our District think--is that the outlook for them is quite bright this year, with really very few concerns about a slowing economy. One or two raised a concern about that but they hadn't altered their plans for production.

In terms of the Greenbook forecast and the outlook nationally, as usual I am chagrined that, to some extent, again we are pushing back another year any decline we are going to see in the inflation rate. But that has been a continual concern. I haven't seen us making a lot of progress in the last year and a half. I agree very much with the comments made by Tom Melzer that we have done some things that are unusual. One is the growth in total reserves. Maybe Don can talk about that a little later; I don't know exactly what it means. I know that it comes from interest-sensitive asset flows being shifted around. But it seems to me if it's something that we ought not be concerned about at least we should question whether or not there's some significance to it in terms of the outlook. The lag problem is always with us. I presume Mike has built that into the forecast. Now, I have no confidence that any other forecast is better than this one. So, my concerns are the same as his--well, I don't want to speak for him. I view the errors as likely to be on the high side in terms of inflation rather than on the low side. I'll save the rest of it for the policy go-around.

CHAIRMAN GREENSPAN. Governor Johnson.

MR. JOHNSON. I don't really have much to add. We got a rash of weaker indicators for the month of February, where almost across the board all of the data suggested a weakening. But we don't know

whether that is weather-related or not because of the strong data for January. There certainly are some signs of slowing. I agree it's too early to assess whether things are significantly slowing or whether this is establishing some sort of trend. Real personal consumption expenditures seem to have been on a modest track for more than just one month and the order books on capital goods seem to have been moving at a moderate pace for several months now. So, I think those are promising signs. But I don't think there are any indications of things going overboard on the weak side. Or, at least if they are starting to slow down quite a bit, we only have one month's observation. It's too early to make any judgment one way or the other on that. I think the inflation news recently has been disappointing; but at the same time we knew these lags were built in. Those forces were set in place long ago and we've got to look forward. So the question is whether we have put in place strong enough policy that, with a lag, we're going to get the results we're looking for. That's the key question. I don't think anyone knows this for sure; but we have moved quite significantly over the last intermeeting period and we will just have to see. Economically, I think we are in an uncertain period.

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. My sense is that consumer spending in the United States is rather gradually coming into line with what needs to happen. Maybe some of this is interest-rate induced; maybe some of it is demographics; maybe some of it is actually the impact of higher prices and higher interest rates on budgets. In many ways that looks like a 1 to 2 percent growth rate of consumption, which seems to me is exactly what we would like to see happen. And it seems to me that this happens in an environment that's not very prone to a recession. When I look at inventories and at the factors that ordinarily lead to recession I just do not see the economy going into recession in the foreseeable future, and I guess that would take us through the first quarter of 1990. I recognize it's a narrow path to have this slowdown in consumer spending without overshooting and getting a recession out of it. But it does seem to me that that's still a possibility. Hindsight, it seems to me, would say that some of us who watch commodity prices didn't say as much about it as we should have said, but there is a clear indication that year-over-year rates of change in commodity prices have been moderating. But they have been plateauing in a very, very slow manner. Of course, we had the November-December spike in which the world food situation began to be somewhat more clear to the people that follow it. We saw food and fiber prices [rise] in November and December. We've had a year-over-year increase of 42 percent in the price of wheat; the price of wheat is almost 80 percent of its high, which occurred back in 1974. And that's a price that really is very conducive to increased production worldwide. The weather situation is, of course, a very clear one; and it gets interpreted into those commodity prices very, very rapidly. I suppose some things could go wrong but I guess I'm comforted, Tom, by the 2 percent M2 number. Given the price pressures that are there, I couldn't be more satisfied with any M2 growth that I can think of than what we're getting. I suppose it does run some risk of being that close to the precipice. But I think it would be riskier still if we were going along with growth of M2 at a much more rapid pace.

CHAIRMAN GREENSPAN. Any other Governors wish to add anything?

MR. HELLER. I think the general reluctance, Mr. Chairman, is indicative of the fact that we all like where we have been and we don't like where we are going. Maybe Mike Prell said it best when he said we're in danger of overshooting the runway and when you overshoot the runway you tend to get stuck in the mud or something. So, with regard to the general picture of the economy that's unfolding here, I'm not particularly fond of the declining investment activity, which doesn't build additional capacity nor of the export picture not being as good as it could be, although we continue to make progress. I see the export picture mainly as a problem of different regions in the world economy and relative exchange rates rather than our absolute exchange rate levels towards Europe. We are in an approximate balance now or actually are running very, very small surpluses, but [not] toward Japan and Korea; obviously that's where the problems are located. And I'm not sure that exchange rate changes are the right way to go at that particular problem. So it isn't going to be very pleasant. But it's all we've got, right?

CHAIRMAN GREENSPAN. There's only one economy. Anybody else before coffee?

MR. HELLER. Sounds better than anything else, right?

CHAIRMAN GREENSPAN. Well, why don't we break now.

[Coffee break]

CHAIRMAN GREENSPAN. The dollar is up to 133.20 on the yen; the bond market is up over 9/32nds; the stock market is at [unintelligible]. What do they know that we don't?

MR. SYRON. Plenty of confidence in us, that's all!

CHAIRMAN GREENSPAN. Which was my opening refrain to Don Kohn.

MR. KOHN. Well, they're in a lot of trouble! [Statement-- see Appendix.]

CHAIRMAN GREENSPAN. Thank you. Let me quickly ask on Chart 7: I assume that you're not repeating before 1978 because that's when the whole survey started. Or is it because other proxies don't give you as good a correlation with the very present?

MR. KOHN. Yes, I think it's sort of suspicious too. This chart is plotted from 1978 because that's when the 10-year Hoey survey started. We have done some other experiments using, for example, 1-year rates with 1-year inflation expectations. They tend to get very poor results in the 1960s and somewhat better results in the 1970s and 1980s. They also suggest that there have been changes in the natural real rate, which was a little higher in the 1960s, a little lower in the 1970s and much higher in the 1980s.

CHAIRMAN GREENSPAN. Any questions?

MR. JOHNSON. Just one. On the Hoey survey, was that last survey taken before or after our discount rate [action]?

MR. KOHN. I don't know.

MR. JOHNSON. It's a February survey number.

MR. KOHN. Yes, it was the last half of February, but I don't know the exact date. I know it was after that first PPI number and before the second; that I checked on.

MR. JOHNSON. Okay. That's all I need.

MR. KEEHN. Don, maybe you answered this, but in the cool light of hindsight has the Hoey survey had a reasonable degree of accuracy?

MR. KOHN. Well, I don't know. I'm not familiar with--

MR. PRELL. It only had one observation in 10 years. You'd have to look back.

MR. KEEHN. Well, on the shorter?

MR. KOHN. I don't know, President Keehn. I haven't seen a study which tends to do that. Generally, these market expectation studies don't show that the market does a very good job of [predicting] what's going to come. But also, I look at it not as a way to see if the market may in some sense be more accurate than someone else, but rather as giving us some clue as to what's going through people's minds, whether it's accurate or not.

CHAIRMAN GREENSPAN. Questions for Don? If not, let's move on to a discussion of policy. I'd like to start off by saying that the [outlook for the] economy is generally uncertain, a view I assume a lot of us share. My own impression is that the odds are that what we're going through now is more likely to be a pause rather than the beginning of a downturn. But the odds are less, I think, than they were in earlier stages in this particular cycle, if for no other reason than that we are at much higher levels of activity and the probabilities that the economy will eventually tip over obviously are linked to how long the expansion has been going on, even if age per se does not necessarily throw us over. But there are signs that orders are a little shabby. Basically, with the dollar very strong and with the money supply growth factor rather modest--even though the odds in my judgment are somewhat better than 50/50 that we will probably have to tighten again before this cycle is over--this strikes me as probably a good time to pause and see what effects our actions to date have. That would lead me to come out for "B" asymmetrical towards tightness. Governor Johnson.

MR. JOHNSON. I'd just follow up on that, Mr. Chairman. That's pretty much the way I see it. As I said in my statement just before the coffee break, I think there are certainly some signs of slowing but not enough to feel that a clear trend has been established, although I think we have enough observations on new orders and in the real consumption area to suspect that things are at least slowing or moderating. Whether that will be sufficient is

certainly not clear at this stage. But, given the fact that we have just recently moved fairly significantly on policy, I think we at least ought to wait a while to see how those lags work out. I think it's probably still true that the risks are somewhat asymmetric, so I can certainly go along with an asymmetric policy position in terms of our pause.

CHAIRMAN GREENSPAN. Governor Angell.

MR. ANGELL. Mr. Chairman, I agree with your view in regard to a pause, so I would go with alternative B also. I have a slight preference for being symmetric but not for operational reasons. It's simply that I believe if we are symmetric and we need to take that next step--and I think there is at least a 50/50 chance that that's the case--we can do it with symmetric language. But if it happens that we don't need to take that move, we just look a little wiser by hindsight. I don't know whether that impresses anyone or not.

CHAIRMAN GREENSPAN. President Parry.

MR. PARRY. Mr. Chairman, I have a request for clarification. In the Bluebook it's stated that alternative B would assume roughly a continuation of 9-3/4 percent [on the funds rate] and that money market rates might tend to decline a bit if that indeed is where we came out. It seems to me in terms of maintaining the existing degree of restraint in financial markets that the market is probably thinking more about 10 percent. Could I interpret support of "B" as being an operation which would cause money market rates to remain at roughly their current levels?

CHAIRMAN GREENSPAN. I would think so. My own impression is that it's much too soon to allow the markets to get any signals, erroneous or otherwise, that we're backing off. That would strike me as a very inopportune signal.

MR. PARRY. So that could be consistent with a slightly firmer funds rate?

CHAIRMAN GREENSPAN. I would think so.

MR. PARRY. Okay. Well, in that case I certainly would favor alternative B and asymmetric language at the present time. However, if further signs of slowing do not become more convincing in the next several weeks, I would certainly recommend that we consider moving to alternative C promptly.

CHAIRMAN GREENSPAN. President Black.

MR. BLACK. Mr. Chairman, I favor holding policy steady over the period ahead, for a period of the next few weeks anyway. My hunch is the same as the one that's there [in the forecast] and also the one you made in assuming that some further increase in the funds rate is probably going to be needed later on to keep inflationary pressures and expectations from building up over the months ahead. So, I would want the directive to be asymmetrical. But I think it's also possible that we've done enough, particularly in looking at the behavior of M2 and how that has decelerated. I realize a lot of that stems from how opportunity costs of holding M2 [have changed] just recently; but if

you look at the last two years M2 growth is still down to 4.7 percent from many years at a trend rate of about 8.9 percent. That is one whale of a lot of deceleration over that period. That leads me to be more sanguine about what might happen to inflation than I would be in the absence of that decided deceleration in M2. So, I would go with "B," at least until we have more information on the March figures; I'd watch those closely because I may well be wrong on that. Certainly, the current statistics do not reflect anything that would suggest that we ought not tighten more. You've got to look way back at what has been put in train, guess about those lagged effects, and reach the conclusion that now is the time to pause. And that's really where I think the focus ought to be right now.

CHAIRMAN GREENSPAN. Vice Chairman.

VICE CHAIRMAN CORRIGAN. Well, as you know Mr. Chairman, I blow hot and cold on this, to put it mildly. I probably have changed my mind about what is the right thing to do about once every hour for the past two weeks. I clearly think that we've got to maintain a tilt toward firmness; indeed, I think my preference would actually be to come out somewhere between "B" and "C" right now. Let me just elaborate on two basic reasons as to why that's where my preference lies. The first is, as I've said before, that it seems to me we have a period immediately in front of us just about baked in the cake in which the price statistics are going to tend to be on the bad side. I think that's kind of locked in. By "bad" I don't mean anything like those January-February PPI numbers but something in the range of 5 percent or higher. Again, if our forecast and our hunches about soft landings prove to be right then we could get lucky. On the other hand, if our forecast and hunches about soft landings are wrong and we have a pause rather than a slowdown then I think we have real trouble, which is another way of saying that I still think the risks are distinctly asymmetric.

I have another concern that reinforces my tilt [preference]. And that is, notwithstanding Don Kohn's Chart 7--which I agree is pretty impressive to look at--I still worry that the changes in the financial system and structure may well have produced a situation in which it takes a higher level of both nominal and real interest rates to get the same degree of restraint that might have been associated with that nice neat relationship in Chart 7. And that leads me to a couple of things. First of all, as we look around right now there is no evidence that I can see of any credit availability problems. There's plenty of credit there. That shouldn't surprise us, given all the structural changes in the financial system and so on. But what it means, of course--and Ted Truman touched on this--is that one way or another restraint has to come through price effects. Price effects either mean the exchange rate--and if they are the exchange rate that complicates immensely that medium-term problem I spoke of earlier this morning--or they have to be one way or another through interest rates. But what I'm not so sure about is how much we know today about the way the interest mechanism itself works. For example, take the consumer sector: it's unambiguously clear that rising interest rates have a net positive impact on personal income even after you take account of floating rate mortgages and home equity loans. Now, that itself doesn't tell you too much; you then have to make a lot of judgments about relative propensities to consume. But it's unambiguous in terms of its cash flow effect on the consumer sector as a whole.

CHAIRMAN GREENSPAN. But adjustable rate mortgages are only 25 percent of total mortgages.

VICE CHAIRMAN CORRIGAN. That's true. That's what they are right now. But on the other hand, the business sector clearly is hurt more in cash flow terms by rising interest rates than it once was. And we get the anomalous effect that at least in cash flow terms the effects of rising interest rates are more of a problem in the place where we need spending activity rather than in the consumer sector where it should go the other way. Just as another illustration of this financial engineering, we're now all familiar with the swap market but we now have emerging markets in interest rate caps, collars, and floors. And this market, which is only a couple of years old, we know to be \$300 billion in size and we think it is probably \$500 billion in size. This market didn't even exist three years ago! And as a reflection of the way that market has been working in recent months, the open interest in Euro-dollar futures contracts in Chicago is now up to \$760 billion. Now, I just don't know myself how all these things interact in terms of the way monetary restraint works itself into the system by interest rate channels. But my hunch is that, if anything, it probably works to slow it down rather than speed it up. And that's the second reason why I have that tilt. Having said that my preference would lie between "B" and "C" right now, I guess I can go along with your formulation in the spirit of Bob Parry's earlier comments.

CHAIRMAN GREENSPAN. President Keehn.

MR. KEEHN. Mr. Chairman, I would be in favor of your recommendation, namely, alternative B. But at this point I certainly would continue to favor asymmetric language. Not to go further into the operational aspects of it but, if the market's perception is that the fed funds rate target is, say, 9-3/4 or 9-7/8 percent, it does seem to me that we are in a period in which there may be natural upward pressure on that rate. I wouldn't resist it if the rate were moving up to 9-7/8 or 10 percent, whereas I would resist it if, in fact, the rate began to trend downward. So, I'd have a clear bias toward allowing the rate to go up.

CHAIRMAN GREENSPAN. President Stern.

MR. STERN. Well, Si Keehn and Bob Parry have already pretty much emphasized what I would want to point out. That is, I'm afraid that market participants believe we are targeting the federal funds rate closely at this juncture. So, while I favor "B" I think it's important, as we pause in the process of tightening here, that we make sure we pause at the right place and don't give the market a signal that we are in some sense backing off. That's all I would add.

CHAIRMAN GREENSPAN. Governor Heller.

MR. HELLER. I think President Black gave my speech; I'm for "B," asymmetric.

MR. BLACK. Both?

CHAIRMAN GREENSPAN. Governor Kelley.

MR. KELLEY. Thank you, Mr. Chairman. I'm sensing that the theme of this conversation is that it's time for a pause, and I certainly share that. Consequently, I can comfortably support your suggestion. But I would like to repeat what Governor Johnson said a little earlier when we were touching on the matter of lags, and that is: Have we put into place already enough [restraint] that will get us what we want? It's in that sense that at this moment I'm in no hurry to tighten. While I would agree that we certainly don't want to be perceived as backing off in any way--that caveat having been given--I really personally would prefer symmetric language.

CHAIRMAN GREENSPAN. Governor Seger.

MS. SEGER. My preference is for no change, which I guess is "B" with symmetric language. As has been said by a number of people, we have had a substantial tightening over the last 12 months or so; interest rates have risen rather dramatically. Because of these known lags, much of that tightening has yet to be felt by the economy. Also, as Manley said, there have been some signs of slowing. I personally would argue that there's going to be some more coming, particularly in housing and in the auto industry. I haven't heard it mentioned but I think that the thrift situation is something we should be aware of, if for no other reason than we could easily do something that would make the cost of the bailout quite a bit higher. Also, despite the Brady plan, I don't believe we've solved the third world debt problem; maybe it's coming but I don't think it has been done. Too much additional tightening, I think, could negatively impact those third world nations. Finally, I'm very concerned about the dollar perhaps not performing as Ted and his people think it will--that it will stay strong and that that will prevent this export expansion that we all want which, in turn, will make it even more difficult to narrow our trade deficit. So, for all those reasons I would prefer to sit tight and have symmetrical language.

CHAIRMAN GREENSPAN. President Forrestal.

MR. FORRESTAL. Well, Mr. Chairman, I think that a somewhat firmer policy at the moment would be appropriate. My judgment is that we are, in fact, experiencing a pause and not a sustained downturn in the economy. But even if it is not a pause, even if we are seeing some real slowing, I think the risks of recession with a firmer policy are minimal. The Greenbook forecast, with which I agree, is predicated upon some tightening beginning in the second quarter--some tightening from where we are at the moment--and that does not produce a recession in 1990. Moreover, it does not produce any great improvement in the inflation rate. So, not only do I think that we don't need to back off, I think we need to continue our pressure on reserves in order to stay ahead of this inflation curve. We ought to go ahead and do the job now and make a tightening move. I wouldn't do it to any great degree but I think a funds rate around 10 percent, or whatever the equivalent borrowing is, would be appropriate. My preference would be to move now by some small degree.

CHAIRMAN GREENSPAN. Governor LaWare.

MR. LAWARE. Thank you, Mr. Chairman. I can't remember when I was more concerned about the confusion of the signals that I'm reading or as uncertain about my own conclusions. But I guess I feel

that the economy is a lot mushier and that there are more risks inherent in it than most of you around the table do. I'm kind of like the guy who's gone into the saloon to play poker and is willing to check his sixgun at the door and accept the key as the alternative. But I'd like to keep a derringer in my watch pocket. So, I'm in favor of the asymmetric language.

CHAIRMAN GREENSPAN. So that's "B," asymmetric?

MR. LAWARE. Yes, sir.

CHAIRMAN GREENSPAN. President Melzer.

MR. MELZER. My preference would be for "B," symmetric. I can certainly live with what you suggested, Mr. Chairman. The other point I would make, consistent with what I was saying earlier, is that I'd be a little concerned if we reacted to a single number in the intermeeting period. It may be that the markets force our hand and we have to do that. But I think there's going to come a time when--and I don't know how this will be achieved--there will have to be something else on the table so that when we decide it's right to start moving, the markets aren't sitting there saying, well, where's the Fed. With respect to the M2 ranges, I don't know whether we have confidence over a long period of time that if we stick with the lower end of the ranges that that's going to contain inflationary pressures. I just think at some point we've got to get out of this mode of the expectation that if a bad number comes out, boom, the Fed ought to be there doing something right then. And if we are not, all the markets [unintelligible]. That's a very difficult thing to deal with but it does trouble me. And, in my judgment, just not moving in response to a number won't solve that. But I think we're getting to a point that we ought to be worried about trying to break that.

CHAIRMAN GREENSPAN. President Hoskins.

MR. HOSKINS. We think that more tightening probably is going to have to take place this year. I'm not terribly concerned about the timing, provided that when we do--to reinforce Tom's point again--that we take a very credible action and to some extent lead market expectations at that point. We take those actions and we explain them; we tell them what we're doing. So, I'm comfortable waiting for a while. But I am disturbed. Again, many of us have spoken out about price stability; yet as we look at the forecast, we're starting 1991 with roughly the same rate that we have right now. I think that's a concern.

CHAIRMAN GREENSPAN. The truth of the matter is that none of us has a clue as to what the price level will be in the fourth quarter of 1990.

VICE CHAIRMAN CORRIGAN. That's for sure.

CHAIRMAN GREENSPAN. The fact that it's in the forecast I don't think [is important]. However, I think the issue that you raise is. But I wouldn't state it as unequivocally as you state it.

MR. HOSKINS. Well, I think we have to look into the future since, presumably, the lags are 18 months to 2 years or perhaps

longer. And I don't know what else to look at. If that's not our objective then I think we probably ought to talk about it.

CHAIRMAN GREENSPAN. No, I think it is our objective. But when you look out in these forecast numbers--. You've done your models and I've done my model; I would hate to go back and have anyone look at our historical forecasts in this area. That's the reason why I think the money supply issue is so crucial. I agree that if we can hold the money supply growth down, just keep it there persistently, I think we'll win this one. President Syron.

MR. SYRON. I personally would be more comfortable with something closer to "C" than "B" because I think we are probably going to have to tighten at some point and I would prefer to tighten sooner rather than later. But having said that, I'm comfortable with your suggestion of "B," asymmetrically stated. The point that was made that we certainly wouldn't want "B" to be consistent with an easing of market rates--I'm not sure what the exact number is--is an important one. The only other point I would make is that I would not in the immediate period be terribly concerned if M2 continued to grow rather slowly, because I'm not as sanguine that some of these thrift problems, in terms of the deposit outflows, are not going to continue in the immediate period ahead. That's based in part on looking at some data of FSLIC insured thrifts as compared to FDIC insured thrifts.

CHAIRMAN GREENSPAN. I should hope we would be able to make some thrift-adjusted M2 judgments.

MR. KOHN. Of a very rough sort.

CHAIRMAN GREENSPAN. I don't know. Here I am complaining about the price forecast and--

MR. ANGELL. We can call it M2t.

CHAIRMAN GREENSPAN. President Boykin.

VICE CHAIRMAN CORRIGAN. As in M1A?

MR. BOYKIN. I would favor alternative B as you suggested. And I would strongly favor asymmetric language. I would do that because I think projections are extremely important right now. I'm not sure that we will know by the time of the next meeting whether we are in the pause or whether we're heading a little differently. And when this policy record becomes public, following the next meeting, I think it could lead to some confusion in terms of our commitment to having inflation in the forefront of our thinking. I think it could send the wrong signal.

CHAIRMAN GREENSPAN. President Guffey.

MR. GUFFEY. Mr. Chairman, I would favor "B" and an asymmetric directive. I'd just like to highlight the point that Tom Melzer made, however. We have in the past been fairly quick to act on a single number that has been published, given the background of the tightening that we've done over the last year. And that's 3

percentage points over the last year in the federal funds rate alone-- or 2 percentage points over the last 8 or 9 months. I think it is time to pause and see what these numbers really mean. I would like to see a little more accumulation of evidence of this slowing or the lack of slowing before we take any further action. I don't know what that means [in terms of timing] but I think it should be at least a month before we do anything. In my mind that would give us the employment numbers and the next PPI number, I guess. In other words, I need a cumulation of numbers going one way, really, before taking any dramatic action on the asymmetrical language.

CHAIRMAN GREENSPAN. Yes, let me say--and I think it deserves to be said--in the event that some number [becomes available] or that something occurs that is significantly out of tune with this conversation we're having, I think it is obligatory that we have a telephone conference and some rethinking and rejudgments of this. First Vice President Stone.

MR. STONE. I probably come out where Vice Chairman Corrigan comes out, somewhere between "B" and "C." But I certainly would be able to live with "B" with an asymmetric guideline. I am very sensitive to the points that President Melzer brought up about how we're going to get out of this cycle of reacting to each of the numbers that comes out. One of the ways to get out of that is to be ahead of that; and that's why I'd probably prefer to be between "B" and "C." But, for all the reasons stated, I think there is some reason to pause at this point and to be a bit more conservative. So, I could support "B" with an asymmetric guideline.

CHAIRMAN GREENSPAN. It appears as though the critical mass is on "B" with asymmetric language. We could insert that into the directive. Let's have it read and we can put in what we need to as we go along.

MR. BERNARD. "In the implementation of policy for the immediate future the Committee seeks to maintain the existing degree of pressure on reserve positions. Taking account of indications of inflationary pressures, the strength of the business expansion, the behavior of the monetary aggregates, and developments in foreign exchange markets, somewhat greater reserve restraint would or slightly lesser reserve restraint might be acceptable in the intermeeting period. The contemplated reserve conditions are expected to be consistent with growth of M2 and M3 over the period from March through June at annual rates of about--

CHAIRMAN GREENSPAN. 3 and 5.

MR. BERNARD. --3 and 5 percent, respectively. The Chairman may call for Committee consultation if it appears to the Manager for Domestic Operations that reserve conditions during the period before the next meeting are likely to be associated with a federal funds rate persistently outside a range of 8 to 12 percent."

CHAIRMAN GREENSPAN. Would anyone like to amend that or does anyone have any problem with the language as such? If not, could you poll the Committee?

MR. BERNARD.

Chairman Greenspan	Yes
Vice Chairman Corrigan	Yes
Governor Angell	Yes
President Guffey	Yes
Governor Heller	Yes
Governor Johnson	Yes
President Keehn	Yes
Governor Kelley	Yes
Governor LaWare	Yes
President Melzer	Yes
Governor Seger	How do I vote for no change with symmetrical?

MR. ANGELL. You say yes.

MS. SEGER. That being the case, I'll say no.

MR. BERNARD. [Continuing the roll call for the vote:]
President Syron Yes

MR. BLACK. You would have said yes if he hadn't helped you,
Martha?

MS. SEGER. I would have.

CHAIRMAN GREENSPAN. The next meeting is May 16th. We will
adjourn for lunch.

END OF MEETING